

TIMEX-SINCLAIR

Sinclair Survival Column

by Mark L. Fendrick

This month we will look at a series of programs for the T/S 2068 and Spectrum computers published by Novelsoft of Toronto, Canada. They were mentioned a few months ago in our report on the Sinclair Fest in Indianapolis, and this time we will take a look at the programs themselves.

In order of their appearance we start with our look at Artworx which was first released in this country by Foundation Systems. Artworx is a graphics package for the T/S 2068 which contains features which have become standard on those computers known for their graphics capabilities.

As with all of Novelsoft's programs, Artworx comes with a T/S 2068 version on one side and a ZX Spectrum version on the other. On each side are three recordings; Artworx, ZX (or TS) Gallery and some demonstration screens. Once loaded you are given the opportunity to make a backup copy to either microdrive or tape.

With the Spectrum version, the program will automatically detect the presence of a Kempston joystick interface and will default to joystick control.

With a T/S 2068, both joystick and

keyboard control is available at all times. If you feel that your joystick control is either a little too sensitive or sluggish, simple instructions are given for the user to adjust that sensitivity via software control.

Once loaded you start with a blank screen, and the only thing you will have to remember when working with programs comes into play now. That is that in order to invoke the pull down menu all you have to do is press the fire button twice. This will show you the main menu used in Artworx. All submenus stem from this menu. All the features of Artworx are accessed by moving the selection box to your desired feature and pressing the fire button. (While you can use the keyboard to control Artworx, it is much simpler to use even a cheap joystick, reserving the keyboard for text entry only.)

One of the first things that you will notice is that the speed of the cursor does not remain constant. When you first start moving the cursor around the screen you will find that it moves rather slowly, making it easy for fine detailed work. If, however, you are moving the cursor over a long distance, you will

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discover that the cursor will speed up as you go along. This makes bold sweeping drawings go much faster eliminating a major point of frustration. When you stop moving the cursor, the speed returns to normal (slow).

Artworx's features are divided into a number of classifications. Under the Tools classification you will find the following:

View—This allows you to see the drawing screen with your graphic as it would appear without the cursor or menu intruding upon the work area. The menu can, however,

be recalled in the usual manner—by two quick presses of the fire button.

Brush—You have six different brush shapes for use in creating your graphic. When you select the Brush feature, a pull down menu appears from which you select the brush you want to work with. A special brush, which appears to be

blank, allows you to paint with just the available attributes. This comes in handy if you want to reset the paper color, flash or brightness of an area without changing the pixels which have already been set by previous actions.

Spray—This is useful for shading areas with a wider spray than by using a brush

from the feature above. For the densest spray you will find that you must use this feature in a start and stop manner since as you continue, the density of the spray decreases.

Fill—This feature does just as its name implies. When you place the cursor within an enclosed area and select Fill, the currently set attributes fill the inner area. You may find that when filling an irregularly shaped area, that certain portions may not fill on the first attempt. You will then have to reposition the cursor and then repeat the procedure. If you have any gaps in the boundary of your shape, you may find your fill command escaping the inner area.

Zoom—This may be one of the most important features for doing any amount of detail

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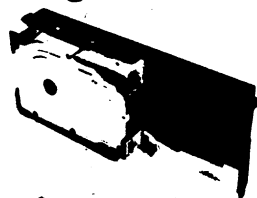
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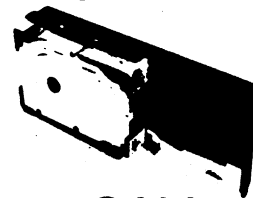
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CALL

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work. Zoom will enlarge a section of your work eight times and give you the ability to turn any pixel included in that area. One thing that you should be aware of, however, is that the Undo feature is not available to you after using Zoom. If you find that you do not like what you have done in this mode, you will have to go back and redo the area pixel by pixel.

CLS—As you would expect, selecting this simply clears the screen of everything. The screen is cleared using the currently set attributes. You may want to clear a screen to apply those characteristics to the background before you start any work. If you accidentally use CLS and erase something you did not wish to lose you can simply activate the Undo feature.

Undo—This very important feature restores the screen to its appearance since the last menu call. This allows you to experiment without the fear that you will destroy any of the work with which you are pleased.

Another very useful feature of Artworx is the ability to define and manipulate windows. First you define the window you want by placing the cursor, pressing the fire button and then moving the cursor. You will see the window grow (or shrink) as you define the opposite corner with the cursor movement. Once defined you have a number of manipulations available.

Move—With this feature you can define a window around an area you want to place elsewhere on the screen, and have it indeed move to the desired position. When this is done, the attributes used in the new position are the currently

about attributes we are referring to the colors of the paper, ink and border as well as such things as the brightness (bright or normal), flash (on/off), over (printing) and inverse (reversing the paper and ink colors). By utilizing the attribute features inherent on your computer, you actually can increase the number of perceived colors with which you can

work. On the T/S 2068 (and Spectrum) attributes may be difficult to work with since they are set within entire attribute blocks. The Grid feature of Artworx shows you where these blocks lie so that you can plan your attribute setting to avoid the inevitable "bleeding" that often takes place.

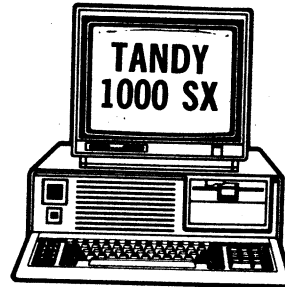
Artworx also allows the

definition and drawing of many shapes by defining just a few points on the screen. It is with these features that you can see and truly appreciate the speed of the program. Unlike similar features built-in to the computer, these shapes are created, defined and drawn extremely rapidly. While you are defining the final point in your shape, you can see the

final result as you move the cursor around the screen. The shape redraws just as fast as you can move the cursor.

To create a circle you first define the center of the circle, press the fire button and then move the cursor to where you want the circumference. Once you are satisfied with your cir-

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Move—With this feature you can define a window around an area you want to place elsewhere on the screen, and have it indeed move to the desired position. When this is done, the attributes used in the new position are the currently set one, not necessarily those in the original position.

Copy—This is the same as Move except that the original remains where it is and a duplicate appears in the new position.

Turn—This allows a 90 degree rotation of your defined window. You can use this feature a number of times until you get the preferred effect.

Big/Small—By using either of these features you can either enlarge or shrink the windowed area by a factor of two. These can also be used repeatedly.

Flipv/Fliph—These will mirror the image within the window either vertically or horizontally.

Clear—This will clear the original image within a defined window.

Perhaps the most sophisticated features of this very sophisticated program involve the attributes. When we talk

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cle pressing the fire button once more makes it a part of the graphic. Arcs, ovals and triangles are defined by three points, lines and rays require two. A box is defined in the same way as a window and the dot command sets a single pixel whenever the fire button is pressed.

Graphics, no matter how

good they look on the screen, are worthless if they cannot be put to use. Artworx gives you a number of things to do with your finished product.

The Load/Save selection gives you onscreen instructions on how to load or save your screen from either microdrive or tape. You indicate the name you desire and the program will monitor for I/O errors. If an error is encountered, you will receive a message and the

program will restart with no loss of picture information—if you are using tape. Microdrive users will have to manually issue a Go To command to restart the program. One of the nicest features of Artworx is that many of the I/O routines are written in BASIC so that the user can modify them to fit alternate devices. If you have a disk interface or A&J Microdrive (or any other mass storage device for that matter)

Novelsoft has included instructions on how to modify the program for that hardware. Artworx is initially setup for using a ZX, T/S 2040 or Alphacom 32 printer. Setting it to use a full size printer is also made easy thanks to the excellent manual which comes with Artworx.

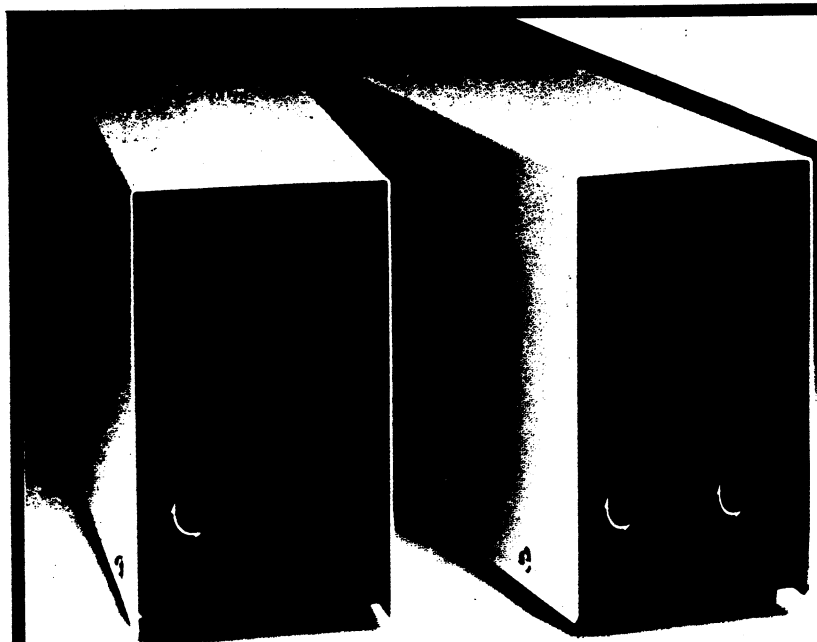
Artworx files are stored with the standard Screen\$ format and may be used in your own programs. The Gallery pro-

gram which is included as a bonus with Artworx gives you another use for your work. Up to five screens may be used by this program which displays them one at a time at a predetermined time interval. This may even be used as a crude animation program.

Working with Artworx is simply a pleasure. Of the many graphics programs I have tried over the years, and been frustrated by, Artworx is the only one which I can truly call simple to use. I still have no artistic talent whatsoever, and even this program cannot change that, but utilizing the features it has is easy and quite fast. For someone with any artistic talent whatsoever, Artworx is the tool to have.

Novelsoft's newest release is called ZXpert and is a demonstration of what can be done with Artificial Intelligence. ZXpert is an Expert System or a consultation program. In this type of program you supply the knowledge by answering questions posed by the software. Once you pick the subject—one that is interesting and challenging—its development is guided by a series of If...Then decisions. The example picked by Novelsoft was "How to Pick a Birthday Gift."

The information required for this decision was decided upon and the following seemed to be the necessary information. The most important factor would be the age of the recipient. This broke down into an infant, child, teen or adult. Next you would have to decide whether or not you knew the person (or in the case of an infant, the parents). Once these situations were defined the type of birthday present which would be appropriate could be decided. Let's see how



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Once loaded, ZXpert will show you the main menu. To start our procedure we will choose Edit to get to the Rule Editor screen. Since this is a new model we are creating we will see that there are currently no rules in the knowledge base. The screen is divided into areas which are used for various parts of the rules you are about to create and messages from the computer. There are four input areas and a help display which shows you the commands which you will use. At the very bottom of your screen is the prompt line (Command = >) which tells you that the program is ready and waiting for input from you.

By entering Insert you are able to enter your first rule. In the example you will first check

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to see if the person is an infant. This is as simple as typing the following:

?Is the person an infant?

Once that simple English question is entered, you can define the response if it is true and a second response for a false situation. ZXpert has an excellent built-in editor which makes correcting mistakes very easy. Also much thought went into the error trapping so that under most situations you cannot accidentally lose any information.

Following this procedure, we are instructed to enter the following questions for the computer to use in determining the type of gift to purchase;

?Is the person a child?

?Is the person a teen?

?Do you know the person well?

?Do you know the person at all?

?Do you want to spend a lot of money? (If infant only)

?Does the person have a hobby?

?Is the person male?

?Does the person like a nice interior?

You then enter the rules regarding the final suggestion once the above questions are answered. For the purposes of this example the following responses are entered—Age represent Infant, Child, Teen or Adult (Male or Not male); Known is either True or False; Afford can be either want to spend a lot of money (True) or not (False); nice interior (H or True/N for False).

See listing on page 390.

ZXpert can also examine all possible answers which fit a particular situation. This is called "Multiple Answer Capability."

Once you have created your

facts currently in the context list.

The ZXpert tape contains two example knowledge bases for you to use and examine. The first one, Photo, attempts to figure out what is wrong with your pictures. It examines all the factors which might cause defects based on common photographic practices. Photo contains over 90 rules.

Analyst is a consultation which tries to analyze a per-

son's intelligence through his handwriting. This is a great party activity.

Novelsoft is on the lookout for original knowledge bases for publication, and included with your copy and manual is a submission form for you to use when sending your creation to Novelsoft for possible publication in their upcoming ZXpert Knowledge Base Catalogue.

As with all of Novelsoft's

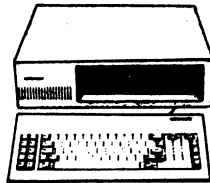
releases I am impressed by the quality of the users manual which accompanies the programs. Artworx is accompanied by a full size 31 page manual while ZXpert comes with a 43 page guide. Not only is there quantity however, there is quality. They are among the finest manuals available with Sinclair software. They are to be commended for this. But, as I was to find out at the T/S Fest in

Indianapolis earlier this year, Novelsoft's true strong point is their after sale support. In speaking with many in attendance at the Fest, Novelsoft was always mentioned as being there when needed. After meeting partners Ariel Fralich and David Ridge, I can understand the comments. These two gentlemen believe that if they cannot put out a quality prod-

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1091I	10"	160 CPS	\$239.95 ea.	2 for \$219.95 ea.

?Do you want to spend a lot of money? (If infant only)

?Does the person have a hobby?

?Is the person male?

?Does the person like a nice interior?

You then enter the rules regarding the final suggestion once the above questions are answered. For the purposes of this example the following responses are entered—Age represent Infant, Child, Teen or Adult (Male or Not male); Known is either True or False; Afford can be either want to spend a lot of money (True) or not (False); nice interior (H or True/N for False).

See listing on page 390.

ZXpert can also examine all possible answers which fit a particular situation. This is called "Multiple Answer Capability."

Once you have created your consultation you will want to save it to tape for future use. To use it, from the main menu you would select the Run option and the computer will start the questioning according to the rules which you have defined.

There are a number of options which you might invoke while your consultation is taking place.

How shows you the sequence in which the rules were applied including the rule, the message or question and the facts which were obtained.

Why shows the current rule and the facts to be added to the context list for both true and false answers.

Print sends a copy of all screen activity to the T/S printer. (Full size printers are not supported by this program.)

Debug gives you a running commentary on what is happening.

Context shows you all the

**Sinclair Survival
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uct and then support it to the hilt they will not put it out at all.

For more information contact Novelsoft, 33 Skelton St, Toronto, Ontario M8V 3W3m Canada; (416) 259-8682, CompuServe 70416,1435).

Next month we will have a

look at two more programs from Novelsoft—The Worx, a desktop organizer, and Timemachine, a BASIC compiler.

Just as I was completing this month's column, I found out about preliminary announcements of two upcoming T/S events. A T/S Mini-Fair is being planned for September in the great northwest. For information contact Rod Gowen,

1419 ½ 7th Street, Oregon City, OR 97405; (503) 655-7484.

Now on the planning boards for the second week of June, 1988 is the Silicon Valley T/S Fest to be held either in San Mateo or San Jose, CA. More information may be had by contacting Norm Lehfeldt, 757 Guerrero St., San Francisco, CA 94110.

As I receive more information I will pass it along here. ●

AGE	KNOWN	AFFORD	RESPONSE
I	F	T	I suggest a baby accessory (crib, etc)
I	F	F	I suggest toys or clothes
I	T		I suggest toys or clothes
I	F		I suggest toys or clothes
C	F		(If hobby known) I suggest something for the hobby
C	F		(If no hobby) I suggest a book, game, clothes, daytrip or candy
C	T		I suggest games, clothes, a daytrip or candy
C	F		I suggest a daytrip or candy
T	F		(If hobby known) I suggest a hobby accessory
T	F		(If no hobby) Clothes, tickets, game, jewelry, personal accessories, record
T	T		Gift item (mug..), jewelry, accessories, game, gift voucher
T(M)	F		I suggest food
T(N)	F		I suggest flowers (or a plant) or food
A	F		(With hobby) I suggest a hobby accessory/book/memento
A	F		(No hobby;H) I suggest a vase, a statue, a tablecloth, etc.
A	F		(No hobby;N) I suggest jewelry, fine food, or tickets
A	T		(H) I suggest a vase, a statue, a tablecloth
A(M)	T		(N) I suggest fine food (dinner, etc.)
A(N)	T		(N) I suggest flowers or dinner or..both!
A(M)	F		I suggest fine food
A(N)	F		I suggest flowers (or a plant) or fine food

More Timex Sinclair

by Michael O'Brien

Dust off the modem, in just a few short weeks as the temperature cools, telecomputing activity zooms to new heights. Each year fall and winter months set new precedents in telecommunicating as the leaves change and a young man's fancy turns to (indoor sports).

Interestingly enough, new and exciting TS BBSs, and BBSs with TS SIGs continue to spring up. You will find a current list of those numbers in this article in addition to a review of BBS software. As always—additional reviews, tips and user support.

Willie Jones and Paul Holmgren (both principals in the 1987 TS Fest) have created an exciting BBS program that runs on the unexpanded TS

2068. The program is currently on-line running the Indiana Sinclair/Timex User's Group BBS at (317) 898-3903. ISTUG was formed by fest organizer Frank Davis following the successful Cincinnati Fest.

The program grew out of experimenting with Tinyboard. In the usual Sinclair (let's see what I can do with this) determination, and countless hours of design, testing, rewriting and debugging, they have produced a fast and functional program that anyone can utilize.

The BBS program features a real time clock that advances itself at midnight, a 40 message-message base, a quick message scan feature, users log, and instant printout of log-ons and sysop messages. Unfortunately, there have been no provisions made for up/

downloads, although Willie tells me he is working on that revision now.

Very thorough documentation accompanies the program that details step by step how to make necessary changes to customize your BBS. At this writing the program is available for \$16 from Willie Jones, 10126 E 33rd St., Indianapolis, IN 46236. Or call (317) 897-9225-VOICE. Mention that you read about it in the *Computer Shopper* and he will ship for only \$14 complete.

Also before beginning a new season of telecommunicating—a few tips. If you have a TS 2040 printer and a 2050 modem, you will notice that the ribbon and cable lengths restrict their placement next to your computer. Naturally most folks will place the printer on top of the modem to conserve

space, but a word of warning. In case you haven't noticed, leaving the printer on for any extended period will heat up the modem (the original cases have no ventilation holes) and the modem may lock up on you. If this happens simply disconnect the printer and modem, and place the modem in a cool spot. If you're unlucky you'll have to go chip shopping. Periodically remove and check all connections to ensure a clean contact.

In order to make Mterm more user friendly, here's a helpful suggestion from the Hampton Rds newsletter. It's very easy to mistake (E)rase buffer for the (E)xit to basic command, wiping out your buffer. This short program changes the on screen prompt from Exit to basic to Quit to basic:

POKE 54510,81 = "Q"

POKE 59569,81 = "Q"

POKE 59575,113 = "q"

POKE 59576,117 = "u"

Save as Mterm code 54016, 9218

I have included a comprehensive listing of TS BBSs and BBSs with TS SIGs utilizing the following coding method.

UD = Up and downloading offered.

8 = Paramaters 8/N/1

7 = Parameters 7/E/1

Sinclair at Night (718) 627-1293 8
Time - X - Change BBS (213) 329-3922 8-UD.
Nite Owl BBS (312) 459-5721 8-UD
Tyler Timex BBS (214) 593-3331 8-UD
Omni-Net BBS (718) 837-2881 7-UD
Bills Obsession BBS (404) 377-2550 8-UD
Owego Free Academy (607) 754-3420 8-UD
TSU BBS (216) 327-1099 8-UD
Serial Port BBS (313) 286-0145 8-UD
Vsys TS BBS (201) 527-0535 7
Qcom BBS (201) 328-2919 7-UD
ISTUG BBS (317) 898-3903 7
Future Electronics (813) 522-0350 7

Computers in Education continued from page 199

are during school. In my own experience, some club students have to be pried away from the machines and told to go home. Free exploration of microcomputers is among the best kind of learning processes. Drill and practice is effective, but must be doled out carefully, lest students be turned off.

Obtain "authoring" software: Authoring packages allow non-programmers to devise programs tailored to specific curriculum needs. The packages can be used over and over again to create new software packages, which can include drill and practice,

interested parents involved. Some have already invested in computers at home, and may offer insight into available software.

Make sure less-gifted get a chance too: Too often it is the case that only the very brightest lights are encouraged to interact with school computers. This is a terrible mistake. Less-gifted, and even "problem" students can gain invaluable experiences in free exploration of microcomputers. Do not foster an elitist attitude, and in fact schedule special computer time for those students who are having trouble interacting with traditional curriculum.

Explore point-and-click

The book covers the questions touched upon here comprehensively, and consists of a collection of hands-on case studies and reports written by teachers, directors of computer centers, principals, superintendents, education consultants, and training managers. Topics include: specific classroom techniques for computer study; adapting commercial software to educational goals; using computers for tutorials, simulations, problem-solving, language arts, math, science, and special education; training plans for teachers; and working around the problems of compatibility.

Personal Computers for Education. by Alfred Bork

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Sinclair at Night (718) 627-1293 8

Time-X - Change BBS (213) 329-3922 8-UD.

Nite Owl BBS (312) 459-5721 8-UD

Tyler Timex BBS (214) 593-3331 8-UD

Omni-Net BBS (718) 837-2881 7-UD

Bills Obsession BBS (404) 377-2550 8-UD

Owego Free Academy (607) 754-3420 8-UD

TSU BBS (216) 327-1099 8-UD

Serial Port BBS (313) 286-0145 8-UD

Vsys TS BBS (201) 527-0535 7

Qleom BBS (201) 328-2919 7-UD

ISTUG BBS (317) 898-3903 7

Future Electronics (813) 522-0350 7

FWKUG BBS (214) 540-4183 8-UD

Loony Bin BBS (619) 390-9470 7

Toxic Dump BBS (609) 890-6347 8

Time Warp BBS (617) 755-0118 7

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Mainstreet Data BBS (619) 439-6024 8

Startext (214) 877-1041 8

People-Link (800) 826-8855 8

Compuserve (312) 443-1250 7-UD

JJ's Fido (505) 522-7081 8-UD

Teachers Pet BBS (704) 547-4185 8-UD

RMG BBS (503) 656-8072 8

Alices Restaurant (914) 477-8017 7

Kings Market BBS (303) 665-6091 8-UD

Time-Hex BBS (317) 362-8085 8

Bus Depot BBS (904) 262-6761 8-UD

LT-BBS/MET BBS (805) 942-7301 8-UD

PCHTSUC BBS (412) 481-9327 8-UD

MCI Mail (Telenet) 8

Source (Telenet) 7

Zebra Systems (718) 625-6220 8

As always, please refer to the
Computer Shopper's BBS list
each month for changes, up-
dates and new listings—and
please dial carefully.

Most BBSs now offer ex-
panded services and QL bases.
If it's been a while since you
have logged onto a system,
you'll generally be pleased with
the constant changing and
upgrading. There is an awful
lot of good public domain pro-
grams on-line.

While the best policy is to

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just jump in and get your feet wet, I will always recommend picking up a copy of Pete Fischer & Steve Ishii's *Guide to T/S Telecommunications*. The guide provides an in-depth look at set up, log-on, up and down loads as well as etiquette and the story behind each BBS.

I have recently noticed the number of uploads for our computers to Compuserve has dwindled. In fact the only categories that continue to grow are RLE graphics and the QL materials available. For us to continue to grow and exchange ideas, more quality BBSs are needed. Starting one up isn't that difficult. There are a number of fine BBS programs available or quite simply contact an existing BBS in your area and suggest adding a TS SIG if there is available disk space. Generally a SYSOP will be receptive to the suggestion

provided they receive continued support.

For Spectrum owners, a few programs worth noting. First Trivial Pursuit. Very true to the original board game and with enough visuals to keep it interesting, however I must mention that as it's of English origin, many of the questions concern European topics. Now since my wife was born in London, I must say that the gameplay was rather lopsided. I think that for once she actually began to refer to my computer rather affectionately.

All in all, Trivial Pursuit is a fine game, and if you regard it as an educational experience it's a good investment.

Another example of this cultural clash is Pub Games for the Spectrum computer. The package is a compendium of pub games from abroad; bar billiards, table football, dominoes, pontoon, poker and skittles. Unless you have a rule book handy or are familiar

with the games, the documentation is very weak.

Again while I enjoyed both tapes, it does take a rather rare bloke to fully appreciate them. Both are available from Curry Computer Company, (602) 978-2902. I must also add that I feel that Rob & Debbie Curry do an outstanding job in obtaining a wide variety of quality programs from abroad.

User Tips And News

As you may already know, Sir Clives latest from the Cambridge Computer Company is available. The Z88 Laptop PC is available by mail order for around \$300. The unit weighs in at less than two pounds and the PC's dimensions are approximately 11½"x8¼", and features a Z80 CPU with 128K ROM. Advance reviews indicate that the keys are slightly smaller and styled while it also offers an expansion bus, RS 232 port, and ports for ROM/RAM cartridges for

storage and memory expansion.

Also unique is the Epson liquid crystal 100 column by 8 line display and the fact that the PC is IBM compatible. Watch for additional hands on reviews here as soon as I get my (hands on)...

For QL owners this month a few tips to pass along. In order to switch from TV to monitor display—POKE 163890, 0:NEW. To switch from monitor to TV POKE 163890,127:NEW.

When writing in superbasic on the QL, to switch from upper case to lower case POKE 163976,0. Then to switch from lower case to upper case POKE 163976, (any other number). And finally to the caps lock mode POKE 163976,65535.

Here is another technique to try when you want to stop the screen from scrolling (although this is not documented), type CNTRL and F5 at the same time, to start the screen in mo-

tion again hit any key.

As always keep an eye here on the *Computer Shopper* as we continue to grow and offer Sinclair, Spectrum and Amstrad owners with the very latest in gossip, reviews, tips, techniques and information...

Timex/Sinclair users are invited to use the new *Computer Shopper* Group on Delphi. We intend to give you folks a section in the database on the Forum. There will also be Timex/Sinclair Conferences. We intend to make the Delphi Group more exciting than any other for all users of Classic Computers. So come on in. The *Computer Shopper* Group is the place to find out all about your favorite machines. Stan Veit the WASWIZ of CEMSIG is the Chief SYSOP and he promises you a great group.